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10/626,903

07/25/2003

Clarence E. Cowan

TAL:1016.098

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02/24/2006

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EXAMINER

CHAN, EMILY Y

ART UNIT

PAPER NUMBER

2829

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/626,903

Applicant(s)

COWAN ET AL.

Examiner

Emily Y. Chan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2005 and 03 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-8, 11-13 and 16-18 is/are rejected.
- 7) ☒ Claim(s) 4, 5, 9, 10, 14, 15, 19 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 August 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-3, 6-8, 11-13 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hollman US Patent No. 6,198,299 in view of Peters et al US Patent No. 6,002,263.

Regarding to claims 1, 6, 11 and 16, Hollman ('299) discloses an enclosure (see Fig. 2, vacuum chamber 26) for a probe station chuck (see Col. 8, line 53 "carrier"), the probe station chuck (carrier) including a device supporting surface (the top layer of the carrier and also see Col. 8, line 53, a carrier for supporting the specimen") and a thermal device (see Col. 9, lines 14-15 "said carrier comprises a thermal chuck). The enclosure (26) comprises a conductive wall (27) having inner surface defining a chamber substantially enclosing the device-supporting surface (see Col. 3, lines 56-67).

Hollman ('299) fails to disclose that his enclosure (chamber 26) has a portion separating the device supporting surface from the thermal device and has portion separating the device supporting surface from an electrical conductor arranged to conduct electrical energy from a controller (16) to the thermal device.

Peters et al ('263) disclose an enclosure (12) (see Figs. 1 and 2) for a probe station chuck (14) including a device supporting surface (42a) and a conductive wall

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(52) having inner surface defining a chamber substantially enclosing the device supporting surface (42) (see Abstract). More specifically, Peter et al ('263) teach that their enclosure (12) partially encloses chuck element (see Abstract) and separates the remainder of the probe station from environment noise sources such as thermal heaters (see Col. 3, lines 10-16).

Therefore, It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to incorporate the teaching of separating the device supporting surface from the thermal heater as taught by Peters et al ('263) into Hollman ('299)' probe station apparatus so that Hollman ('299)'s conductive wall includes the portion separating the device supporting surface from the thermal chuck for the expected benefit of intercepting the external environment noise and minimizing its effects on the inner shield and on the chuck assembly element enclosed by the inner shield as disclosed by Peters et al ('263)(see Col. 2, lines 6-9).

2. Regarding to claims 2-3 and 12-13, Peters et al ('263) teach an electrically conductive connection of a conductive wall (54) to an instrument (see Col. 3, lines 35-36) and an electrically conductive connection of the instrument to a ground (see Fig. 2, EARTH, 32, 22)

3. Regarding to claims 7-8 and 17-18, Peters et al ('263) teach an electrically conductive connection of a conductive wall (54) to an instrument (see Col. 3, lines 35-36) and an electrically conductive connection of the instrument to a ground (see Fig. 2, EARTH, 32, 22).

Allowable Subject Matter

4. Claims 4-5,9-10, 14-15 and 19-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

5. Claims 4,9,14 and 19 are allowed because the prior art of the record filed before 6/30/1999 (the filling date of this case) does not teach or suggest an enclosure for probe station chuck comprising a switch having a first terminal selectively connectable to a second terminal, the second terminal being conductively connected to said conductive wall and the first terminal being conductively connected to a ground as shown in Fig. 4, element 53. Claims 5,10,15 and 20 are dependent on claims 4,9,14 and 19 respectively and are allowed accordingly.

Response to Arguments

Applicant's arguments with respect to claims 1-3, 6-8, 11-13 and 16-18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emily Y. Chan whose telephone number is 571-272-1956. The examiner can normally be reached on 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on 571-272-1705. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EC
2/21/06


VINH NGUYEN
PRIMARY EXAMINER
A.U. 2829
02/21/06